



# NetVanta 1224/1224ST

## Managed Layer 2 Ethernet Switches

### Product Features

- 24-port auto-sensing 10/100Base-T managed Layer 2 Ethernet switch
- Available with SFP/1000Base-T Gigabit uplink ports
- Non-blocking, up to 8.8 Gbps switching capacity
- 802.1Q tagged and port-based VLANs
- Support for up to 255 active VLANs
- Stack up to 16 and manage stack via a single IP address
- 802.1p and DiffServ prioritization with four queues per egress port
- Link aggregation, GVRP, and LLDP
- MAC-based port security
- Weighted Round Robin (WRR) and Strict Priority Queuing
- 802.1D Spanning Tree and 802.1w Rapid Spanning Tree support
- DHCP address management
- RADIUS authentication
- Port mirroring
- TFTP/FTP firmware upgrades
- Broadcast storm control
- Dual firmware images
- Familiar Command Line Interface (CLI)
- Web-based GUI



The NetVanta 1000 Series of managed Ethernet switches is designed for cost-effective Local Area Network (LAN) switching. This scalable, full-featured product line is suitable for networks requiring Layer 2 access switches for interconnecting LAN devices or network segmentation. Ideal for new installations or network upgrades, these switches are perfect for business-class applications requiring Fast Ethernet.

#### Hardware

The NetVanta 1224 and 1224ST rackmount switches support 24 10/100Base-T Ethernet ports with auto-rate, auto-duplexing, and MDI/MDI-X sensing. The NetVanta 1224ST also supports two 10/100/1000Base-T or Small Form-factor Pluggable (SFP) ports for copper or fiber high-speed uplink or stacking capability. The 1224ST can support up to 16 units stacked together and easily managed with a single IP address for the entire stack.

#### Standard-based Protocols

Based on the ADTRAN Operating System (AOS), these devices offer support for Link Aggregation (802.3ad), Port Mirroring, Port-based switching features including Broadcast Storm Control, Spanning Tree (802.1D) and Rapid Spanning Tree (802.1w) for faster network convergence, link redundancy, and recovery from topology changes. Link Layer Discovery Protocol (LLDP) auto-discovers neighboring Ethernet devices, simplifying integration into multi-vendor environments.

#### VLANs

All NetVanta switches support 802.1Q trunking and up to 255 port-based VLANs to allow network managers to separate broadcast domains for efficient network performance and traffic control. To help aid configuration in larger networks, Generic VLAN Registration Protocol (GVRP) is also available.

#### Security

Rest assured, with the NetVanta 1224 and 1224ST your network is protected. These products also offer a variety of data security features including MAC-based port security, multilevel user passwords, Secure Shell (SSH) and Secure Socket Layer (SSL) for encrypted user login, and Access Authentication and Authorization (AAA) for authentication with a RADIUS or RSA SecurID server.

#### Quality of Service (QoS)

NetVanta switches also support QoS to ensure network managers have the ability to prioritize mission critical traffic and control network congestion. The NetVanta 1000 Series offers 802.1p and DiffServ Class of Service (CoS). Each switch supports frame tagging, as well as enforcement of tagged traffic received from trusted sources. Four egress queues (per port) are available for assigning traffic priorities using Weighted Round Robin (WRR) or Strict Priority Queuing.

#### Administration

The AOS offers both a Command Line Interface (CLI) that mimics the widely deployed, industry *de facto* standard and an intuitive web-based GUI with step-by-step configuration wizards. For a centralized enterprise-wide management scheme, ADTRAN offers n-Command, an intuitive, scalable software suite for managing firmware revisions, push firmware upgrades and configuration changes, backup and restore configurations, and manage security policies and Access Control Lists (ACLs).

NetVanta 1000 Series of Ethernet switches are easily coupled with other ADTRAN internetworking products including NetVanta 1000 Series switch-routers, NetVanta 3000/4000/5000 Series Access Routers, and NetVanta 2000 Series VPN/Firewall appliances. All these solutions are backed by ADTRAN's industry-leading support and services.



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# NetVanta 1224/1224ST

## Managed Layer 2 Ethernet Switches

## Product Specifications

### Physical Interface

#### 24 Fast Ethernet Ports

- 10/100Base-T
- RJ-45
- Auto-rate/duplex/MDI/MDI-X

#### Dual Gigabit Ethernet Ports (1224ST)

- Two 10/100/1000Base-T ports for copper connectivity
- Two SFP slots for optical connectivity

#### Console Port

- DB-9, RS-232

### Performance

- Non-blocking
- 8,000 MAC addresses
- 16 MB memory shared by all ports

#### Maximum Forwarding Bandwidth

- NetVanta 1224: 4.8 Gbps
- NetVanta 1224ST: 8.8 Gbps

### Diagnostics

- Port Mirroring
- LLDP (802.1AB)
- Ping

#### Front Panel Status LEDs

- Power
- LAN: link, activity

### Port Statistics

- Number of TX/RX Frames
- Number of Collisions
- Number of Errors

### Spanning Tree Support

- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree

### Stacking (1224ST only)

- Up to 16 switches
- Single IP address for entire stack
- Utilizes built-in 1000Base-T or SFP interfaces

### Link Aggregation

- 802.3ad Link Aggregation
- Support for six trunk groups
- Trunk groups consist of up to eight access ports or two uplink ports

### Class of Service

- 802.1p and DiffServ
- Four output queues per egress port
- Weighted Round Robin (WRR) or Strict Priority Queuing

### VLAN Support

- Port-based VLANs
- 802.1Q tagged trunked VLANs
- Support for up to 255 active VLANs
- Generic VLAN Registration Protocol (GVRP)

### Storm Control

- Broadcast, Unicast, and Multicast

### Administration

- Familiar Command Line Interface (CLI)
- Web-based GUI
- n-Command support
- SNMP v2
- SYSLOG Logging
- Email Alerts (SMTP)
- Policy Statistics

### Security

#### Secure Management

- Multi-level access control
- RADIUS AAA
- SSH CLI and SSL GUI

#### Network Access Control

- Port Authentication (802.1x)
- MAC-based Port Security

### Environment

- Operating temperature: 0° to 50 °C (32° to 122 °F)
- Storage temperature: -20° to 70 °C (-4° to 158 °F)
- Relative humidity: Up to 95%, non-condensing

### Physical

- Chassis: 1U, 19" rackmountable metal enclosure
- Dimensions: 4.4cm H, 44cm W, 19.8cm D
- Weight: 7 lbs.
- AC power: 100–250 VAC, 50/60 Hz
- Power: 25 Watts

### Agency Approvals

- FCC Part 15 Class A
- CE Mark
- UL 1950/CSA
- C-tick

## Ordering Information

Equipment	Part #
<b>NetVanta 1224</b>	
with US Power	1200500L1
with UK Power	4200500L1#UK
with Euro Power	4200500L1#EUR
with Australian Power	4200500L1#AUS
<b>NetVanta 1224ST</b>	
with US Power	1200504L1
with UK Power	4200504L1#UK
with Euro Power	4200504L1#EUR
with Australian Power	4200504L1#AUS
<b>Connectors</b>	
NetVanta 1000BaseSX SFP (LC Connectors)	1200480L1
NetVanta 1000BaseLX SFP (LC Connectors)	1200481L1



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Backplane

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